



LUND UNIVERSITY

Consumer Trust and Platformised Retail Personalisation

Larsson, Stefan; Haresamudram, Kashyap

Published in:
The Future of Consumption

DOI:
[10.1007/978-3-031-33246-3_5](https://doi.org/10.1007/978-3-031-33246-3_5)

2023

Document Version:
Publisher's PDF, also known as Version of record

[Link to publication](#)

Citation for published version (APA):
Larsson, S., & Haresamudram, K. (2023). Consumer Trust and Platformised Retail Personalisation. In K. Bäckström, C. Egan-Wyer, & E. Samsioe (Eds.), *The Future of Consumption: How Technology, Sustainability and Wellbeing will Transform Retail and Customer Experience* (pp. 77-94). Palgrave Macmillan.
https://doi.org/10.1007/978-3-031-33246-3_5

Total number of authors:
2

Creative Commons License:
CC BY

General rights

Unless other specific re-use rights are stated the following general rights apply:
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00



5

Consumer Trust and Platformised Retail Personalisation

Stefan Larsson and Kashyap Haresamudram

I hardly know when I am sharing my personal data; I do it without giving much thought to it, which of course is not a good idea at all.
—Woman, high trust.

Introducing Trust-Dependent Personalised Retail

Picture yourself going to the shopping mall in the near future to purchase the groceries you need for dinner and to figure out what ointment you need to deal with the dry skin on your cheeks. As you enter the grocery store, you initially realise that you've forgotten your wallet. Luckily, they have recently enabled an automated check-out system, using computer vision to detect whatever groceries you pick up and put in the bag you brought with you, and facial recognition that allows you to be identified

S. Larsson (✉) • K. Haresamudram
Faculty of Engineering, Lund University, Lund, Sweden
e-mail: stefan.larsson@lth.lu.se

for payments without lifting so much as a credit card. That is, when you're done gathering onions, cucumbers and milk, you just leave the store without any physical indication of payment, and the correct amount is automatically charged to your bank account.

Then, as you enter the pharmacy, the sales assistant surprises you by already having picked a suitable ointment for you:—"Hello sir! This is based on the data and images we received from data collaboration and the analysis of your earlier purchasing patterns", he explains. "And", he continues, "the prediction is also based on what individuals with your skin type normally need, so we're fairly certain that this will work for you. And, for our club members, it comes with a discount too!"

While still a bit perplexed, you accept the small container, look at it, put it in your bag, and walk out. The exact amount is charged to your bank account as you leave the store.

This scenario has not necessarily arrived yet, but all the individual technologies enabling it are present in retail today—that is, the data-collection infrastructure, consisting of third-party sharing, pilots (at least) using object and face recognition, and the underlying digital and often app-based platform structures that enable data sharing and automated financial transactions. The social foundation for this, we argue, is a basic level of trust in the retailers, in the robustness of the technologies, and in the data not being misused by either retailers or any other third parties. This trust, in contemporary retail, is in part framed by regulations on data protection and structured by user agreements for loyalty card programmes, apps and bank cards, or cookie consent agreements and other types of information intended for digital retail consumers. In this chapter, we draw on four focus-group interviews in order to see what role consumer trust plays in data-dependent retail personalisation, particularly with regards to transparency. This means trying to understand what so-called datafication and platformisation (cf. Poell et al., 2019), which follow a type of platform logic (Andersson Schwarz, 2017), mean for the digitisation of retail. We draw on an understanding of platforms being "(re-)programmable digital infrastructures that facilitate and shape personalised interactions among end-users and complementors, organised

through the systematic collection, algorithmic processing, monetisation, and circulation of data” (Poell et al., 2019, p. 3). Overall, this describes a combination of issues that are all related to consumer trust and data-dependent, as well as AI-enhanced, retail personalisation.

The Unevenly Distributed Future

Parts of the opening vignette—object recognition and the automated check-out—have been undergoing trials for a couple of years by Amazon, in Amazon Go stores. The prediction of consumer needs is mainly known from how the ad-tech market, through data collection and scalable automation, has been trying for several years to target individuals with relevant products and offers. The scale and resources required to do this point to platformisation in retail, that is, an organisational logic that can enable marketing benefits for retailers, but a logic which has also led to a dependency on a few data-driven and large-scale platform companies, for both retailers and consumers alike. Lastly, from a consumer perspective, this type of *datafied* market is perceived as ultimately being characterised by a third-party set-up (Larsson et al., 2021). That is, the data collected from individual consumers is shared or sold, aggregated, and then used or misused on third-party markets.

One can argue that digital uses of consumer data have already revolutionised e-commerce since they are well suited to collecting and using large amounts of data to both accommodate scalable automation in sales and recommendations and to influence consumer behaviour online. Until recently, the Internet has uniquely been able to provide the necessary framework for data collection through the use of cookies and other means of tracking, thus enabling giants such as Amazon to bring customers and businesses together, and enabling traditional retailers such as Walmart to create an equally large online presence in order to remain competitive. While it has been speculated that online retail might potentially come to replace bricks and mortar stores during the meteoric growth of e-commerce, sometimes termed the ‘retail apocalypse’, some research does indicate that physical stores remain an integral part of the shopping experience of the customer, and still growing (cf. Lafontaine & Sivadasan,

2020). Rather, the rapidly shifting landscape of retailing is forcing physical retail to evolve to remain competitive, perhaps even being complementary to e-commerce in some cases. Post COVID-19, for example, delivery services have become ubiquitous around the world, linking small physical retailers with customers through apps and a logistics infrastructure that would have been impossible for small retailers to build up on their own.

In the next part of Section “Introducing Trust-Dependent Personalised Retail”, we develop the ongoing discourses on the role of data and AI in retail development in order to present our perspective on consumer trust. Subsequently, we point to how data collected both in-store and online can be utilised for personalisation. Lastly, we point to both concerns regarding consumer resignation (cf. Draper & Turow, 2019) and what seems to be a formative period in European regulation concerning data, platforms, and AI. In the subsequent section, Section “Focus-Groups: Consumer Sentiment Regarding Data Collection and Personalisation”, we present the results from the focus-group interviews, focusing on consumer perceptions of transparency, data collection and personalisation. In Section “Discussion: Platformisation and Personalisation”, we draw on the results in order to discuss platformisation and personalisation as well as how these are interconnected, before summarising the chapter in Section “Conclusions”.

Efficiency, Trust and Lack of Control

Recent datafication in retail shows a potential for increased efficiency and individualised customer services through the use of large amounts of data and of increasingly sophisticated analysis of customer behaviours and needs (cf. Cukier, 2021). Increasingly, this is being discussed using the terminology of Artificial Intelligence (AI), largely focusing on recently attained capabilities in machine learning to draw insights, detect patterns, and make automated predictions based on the collected data. At the same time, several studies show growing concern among, or for, customers, for example, with regard to vulnerable groups and AI-driven marketing (Mogaji et al., 2020), which is largely due to a lack of control

and co-determination of one's own data in both digital/online (cf. Datatilsynet, 2020) and physical retail (cf. Draper & Turow, 2019; Turow, 2017). In this chapter, we make empirical observations from focus-group interviews in order to outline some of the emerging contours of an AI-driven retail that is dependent on immense data collection, prediction and automation, and its relationship with consumer trust. We see trust as the main prerequisite for functioning markets per se, which is further emphasised as new technologies are utilised in a way bringing change to established customs, possibly with a lack of consumer control, increased complexity, and a lack of transparency. This indicates a need for retailers to be attentive to this social contract with consumers, that is, the perceived legitimacy of the collection of their data to be shared in complex third-party set-ups, or with which to analytically match or predict aspects of these. The limits to these technological practices in retail should not only be seen as set by technological constraints and law alone, but also in terms of social sentiment linked to fairness, legitimacy, and trust. Before we draw on the focus-group interviews, we need to develop more of the combined offline/online practices, which we refer to as hybridity in retail personalisation. In addition to this, we will also briefly point to some concerns that have been voiced in the literature, and mention European legislative activities that are ongoing and of relevance to the field.

Hybrid Retail Personalisation

Now, advancements in various types of sensor technology and analytical methods in machine learning are making it possible to track consumers and collect rich data, not only in a digital and Internet-mediated context, but also in the physical environment, too. Sensors are able to collect spatial data such as in-store location, time spent, and movement, as well as personal data such as age, sex, body type, attention span, and mood (cf. Mavroudis & Veale, 2018). This, in addition to existing and more traditionally collected data from loyalty card memberships and purchasing histories, but also behaviour when in online stores and using apps, means that consumer behaviour can be captured in unprecedented detail both,

on- and offline. This creates a wealth of behavioural data, allowing novel hybrid retail experiences and the greater personalisation of pricing, recommendations, and services, but it also leads to questions as regards to what end and for whose purpose an experience is personalised (cf. Kohl & Eisler, 2021). Think about the scenario outlined above: The data from your physical activity while in the grocery store and your purchasing history, perhaps online, are combined in order to recommend the right ointment for your dry skin. Currently, digital and physical retail are largely separate experiences: However, hybrids such as the one in the scenario above are being developed, and will mean that the platformised and interconnected retail environment is growing. However, with the immense growth in digital platforms and their data-dependent markets, consumers and retailers alike will be dependent on large platforms to handle their interfaces, anything from marketing to app stores, smartphones and data storage. While this may increase efficiency, and enable useful match-making in times of information overflow, it can create dependencies that are problematic from a competition perspective (Larsson, 2021). Furthermore, combined with AI and machine learning, the ongoing discourse on the lack of transparency for end-users (consumers) provides us with a range of challenges of relevance to this development (Larsson & Heintz, 2020).

As recommendations become individualised, automated, and mediated by third-party platforms, it becomes relevant to address this from a consumer trust perspective. Dynamic pricing and price discrimination are two variable pricing strategies that are well-researched in terms of more traditional retail, but not necessarily when it comes to digitised and automated pricing methodologies at the individual level. In brief, dynamic pricing is when prices vary based on supply and demand, and price discrimination is when prices vary based on the willingness to pay. Dynamic pricing is already used in several industries. The aviation industry is perhaps the most notable example of the successful employment of this technique: However, Uber, AirBnB, and other AI-driven services have also had success with it. Price discrimination at the individual level is not so commonly seen, but is a practice that can be enabled by automated and platformised markets. While most pricing, being primarily governed by demand and supply, generally does not seem to factor in

personal and behavioural data, in the datafied retail environment of the future, this concept can be taken to the next level, with real-time, individualised pricing changes based on the willingness to pay (as critically discussed by Turow in *The Aisles have Eyes*, 2017). This means that individuals who are able and willing to pay more for the same product would be given a higher price than individuals who might not have been able to afford the standardised price, and who would now be offered a reduced price. Some research indicates that consumers may not have a favourable opinion of differentiated pricing—in particular, that it has a negative effect on trust (Garbarino & Lee, 2003). Amazon was famously accused of practising price discrimination in 2000 when a customer found that the price of a DVD was lower after deleting cookies from his/her browser: This led to Jeff Bezos promising to never use this at Amazon. Tinder, the dating app, has been scrutinised lately with regards to opaque and complex individual price discrimination, something which we will come back to in Section “Discussion: Platformisation and Personalisation” below.

Resignation and Regulation

In short, before we turn to the focus-groups used in this study, there are studies pointing to both privacy concerns and consumer resignation in terms of consumer sentiment towards data collection. This can be at odds with the development of novel retail experiences that are enabled through tracking and automation. Trust, transparency, and accountability, as a result, seem to play a key role in enabling innovation, and in fostering a fairer course of development without undermining consumer agency and autonomy. Lastly, in terms of EU policy, there has been much activity over the last few years aimed at finding a balanced regulatory approach to the digital- and data-driven markets, also relating to large-scale platforms, their lack of transparency, and AI. The EU has been catching up with technology innovation with regard to AI during recent times, seen in its proposal for an AI Act, its Digital Markets Act, and its Digital Services Act, forming an umbrella of regulation for digital- and data-driven markets, in addition to the already-established General Data Protection Regulation (GDPR).

Focus-Groups: Consumer Sentiment Regarding Data Collection and Personalisation

In the following section, we briefly touch upon three key aspects: (1) the non-transparent practical status of user agreements, (2) consumer sentiment regarding data collection, and (3) the role of trust in retail personalisation, as studied through focus-group interviews. In 2020, four focus-group interviews were conducted, as part of a series of studies on data privacy and AI transparency, in collaboration with Novus, a company specialising in market research. The participants were recruited for the interviews via the Novus Sweden panel, in relation to their stated trust in companies, websites and services that collect data online (e.g., through cookies, search behaviour, history, etc.), but also companies/shops and the like that save personal information (e.g., from customer loyalty cards, club memberships and loyalty programmes). Two groups of people with a high level of trust ($n = 24$), and two who had indicated a low level of trust, or a level of trust that was neither high nor low ($n = 24$), were recruited. The focus-group interviews were conducted online in a chat room environment due to COVID-related constraints. The focus-group interviews were divided into two parts. The first part contained questions regarding cookies and user agreements, perceived trade-offs, web tracking, customer clubs, unstaffed automated shops, and using smartphones as data collection tools. The second part contained questions regarding digital advertising, trust in the retailer, the willingness to share information, and targeted recommendations. This includes what we refer to as data-dependent, AI-driven, retail personalisation. The methods used for this type of targeted recommendation are increasingly data-intense, utilising machine learning to make predictions.

Lack of Data-Collection Transparency: So-Called Consent

In terms of data collection, particularly in the form of cookies and user agreements, all groups expressed a sense of resignation: They felt as if they really had no choice and that they “had to” accept cookies/agreements in

order to be able to use services (cf. Larsson et al., 2020). It was apparent that, instead of reading agreements, people trusted operators not to scam them, which is why many chose to use services from providers that they were familiar with, or that they otherwise deemed trustworthy. However, few of the participants believed they knew whether their providers were trustworthy or not, but reputation and “gut feeling” played a major part.

When it comes to digital tracking by third parties, respondents believed it was not possible to read through all the website agreements or to consent to cookies or other information on data collection and data management available there. A common opinion was that there were too many agreements, with the language being complicated and the layout tending to be impenetrable. The interviewees were not particularly surprised by the existence of web tracking using third-party cookies per se: However, they were amazed at its extent, especially with regard to the widespread use of third-party participation.

Personalisation or Surveillance? The Level of Trust Decides

Generally, the level of trust in screening that individuals indicated seemed to determine how they perceived data collection and automated services. Those in high-trust groups were more likely to feel that the offers and recommendations they received in exchange for (even passively) sharing their data were valuable, and that the value they received was roughly in proportion to the value of the data they shared. Those in low-trust focus-groups expressed some scepticism, describing uncertainty regarding whether or not the data they were sharing was being resold and seeming more likely to perceive data collection as *mapping* or *monitoring*. In addition, participants in these groups described various strategies for circumventing data collection, for example, not using their club memberships or by purchasing products they would not normally buy, which is quite remarkable, in an attempt to sabotage perceived profiling or mapping. The high-trust group reacted very positively to unstaffed automated shops (the example of Amazon Go was used in the interviews), saying they would like to have access to this type of grocery store. The reactions

of the low-trust group were not positive. They were hesitant about Amazon in general, but mainly here about the lack of human contact.

Thus, agency and control seem to play a key role here. Customer clubs and explicit data sharing—for example, situations where customers actively share an address—were often described as more trustworthy than the more automated data collectors. Retailers with physical stores and established names, that were local or national players and larger companies/chains, generally enjoyed, it seems, greater trust on the part of the participants than did their all-digital counterparts. If there were greater transparency, and a guarantee that operators would not sell data on to third parties, then consumers indicated they would be more willing to give up their data to merchants and, above all, more confident in doing so. The participants indicated four key pieces of information and assurances they would want before being comfortable with sharing their data: (1) What the data would be used for, (2) why it was being collected, (3) that it would not be used for tracking and monitoring individuals, and (4) it would not be sold to third parties.

Broadly speaking, the differences between the groups are shown, on the one hand, by the participants with a low level of trust being worried about losing control of their data and wanting to be more informed about when that happens, while on the other, the participants with a high level of trust felt less worried about their data being misused and also saw more benefit in sharing their data (for reciprocal services), and thus the exchange was perceived as more even. The pattern emerging from this focus-group is consistent with other studies in the field, highlighting trust, transparency, and agency as key consumer needs in the creation of healthy datafied retail (Chang et al., 2013; Larsson et al., 2021). However, each of these needs is more complex than it would seem on the surface. While trust is important, it also seems to be the case that consumers continue to use services despite having at least some misgivings: Transparency is required, but at the same time consumers are overwhelmed by information and it seems more important to feel a sense of having agency rather than exercising it. This is likely to be of relevance when looking at even more individualised relationships between consumers and retailers, enabled through automated and adaptive ways of engaging consumers, here addressed in terms of AI-driven personalisation.

Discussion: Platformisation and Personalisation

In this section, we combine aspects of the digital organisational logic that we call platformisation with the automated version of personalisation in order to point to how these jointly enable retail practices that can both benefit consumers and be a threat to them. From a consumer point of view, we mainly problematize aspects of the lack of transparency regarding how consumer data is used during both profiling and prediction, as well as the lack of control that accompanies third-party data markets and fears of being manipulated through data-driven nudging. From a retailer perspective, platformisation, as a digital market logic, offers efficiency at scale, useful marketing and analytics with the potential for greater accuracy in both recommendations and discounts. It does however also lead to a dependency on large platforms, that may unfairly use this dependency to their advantage. And, in the worst-case scenario, being a data-extracting third party, this may contribute to an undermining of consumers' trust in the retailers.

From Platformisation to Personalisation

Data collection in retail, particularly so for e-commerce, can be seen as a wider digital ecosystem, part of a societal-level shift towards platformisation (Andersson Schwarz, 2017; Poell et al., 2019). On both the infrastructural and market levels, a small number of companies are highly dominant. They are positioned as unavoidable infrastructure when a retailer uses digital marketing, stores data in the cloud, launches an app, or sells via an aggregated marketplace. While this may mean the efficient distribution of roles, whereby, for example, analytical tools and marketing are offered at low cost to retailers, it may also amplify consumers losing control of their data as they become data sources for ad-tech markets (Larsson, 2021).

Looking ahead and focusing more on behavioural analysis and consumer profiling abilities, the combination of data from various sources can also be seen as a type of platformisation. Conglomerates operating

across various industries can potentially leverage their position to build a large corpus of personal data across various sectors of retail, allowing highly detailed behavioural analysis, which we have mapped elsewhere (Larsson et al., 2021). For example, picture a grocery store that is owned by a company that also owns a pharmacy, and a health insurance company. In theory, customers using all these services might be able to get highly specific and targeted suggestions for grocery shopping based on their pharmacy shopping, and have their lifestyle choices reflected in their insurance plan. This is precisely what was demonstrated in the scenario at the beginning, where the pharmacy was able to learn about the shopper's skin condition using, perhaps, the facial recognition tech at the grocery store, with data sharing made easier by being part of the same conglomerate and data infrastructure.

This adds to the complexity and the lack of data-handling transparency, both for retailers and consumers, which in turn raises ethical questions being brought up in a growing body of literature on AI governance, including questions regarding where personalisation starts to infringe upon autonomy and fairness. (“Data-driven personalisation” is discussed from several perspectives in an anthology edited by Kohl & Eisler, 2021). In a retail context, for example, this could involve a grocery store nudging individuals to make healthier or sustainable decisions. Imagine, in the vignette scenario, the pharmacy advising you to buy omega-3 supplements because it was noted from your shopping history that your diet lacked that. While helpful in theory, it raises several questions: How would that end goal be set, and by whom, and how could we ensure that the consumer is involved in this goal setting?

From Personalisation to an Automated Lack of Transparency

The platform logic (Andersson Schwarz, 2017) links to the data-driven and automated phenomenon of personalisation, which in itself is not necessarily undesirable, because it allows highly customised retail experiences, and potentially saves both consumers and retailers time and money. One challenge seems to lie in control and consumer agency—For what

reason is a service individualised, based on what data, and according to whose goals? This was clearly raised in a recent mapping of how the dating app Tinder is setting prices for its paying premium customers. Swedish NGO *Sveriges Konsumenter* (“Swedish Consumers”) jointly conducted a survey study with Södertörn University in 2022 which indicated that 36 different price-levels were being used for Tinder’s premium subscription, without communicating any of this to users (*Sveriges Konsumenter*, 2022). That is, according to this study, some consumers paid 12 times more than others did for the same service, without knowing it. The NGO concluded that there was a lack of transparency in how, and for whom, this was being done, or what personal data the company was using in order to do so. This is corroborated in a similar study of other markets, where Consumers International and Mozilla (2022) studied the same app, but in six other countries, from the perspective of consumer trust and regulatory frameworks in relation to personalised pricing. This study states that the lack of transparency in the use of data and price-setting is a problem from a consumer point-of-view, and that consumers are seeking improved protection with regard to this.

Pricing is generally unregulated and left to the markets to handle, but the lack of transparency for consumers may create concerns from a trust perspective. If we were to consider, in the ointment purchase in the opening vignette, dynamic and individualised pricing in accordance with analytical predictions of one’s “willingness to pay”, it would indeed be hard for individual consumers to understand and compare with others how their offered price differed. This would mean a strong (“asymmetric”) information advantage for the seller, especially if the data used to profile the customer is rich. This advantage could, at worst, be used to time offers made to consumers to moments when they are in the most desperate need of a service. This concern has been raised in terms of payday loans with high interest rates offered to debt-laden consumers who quickly need cash (cf. Mogaji et al., 2020), in terms of complex betting ads aimed at those with addiction problems, or in terms of Uber’s surge-pricing during emergencies and natural disasters (The Verge, September 25, 2018). Consumers in our focus-group study also indicated that third-party involvement added to a sense of losing control, related to them losing track in this way of where their data was going and to what end,

regardless of whether this concerned pricing or not. Personalisation in retail would therefore have to take into account how this can be developed to give a sense of the consumer still being in control over his/her data, as well as to what end tailored services were being provided, and by whom.

Conclusions

In this chapter, we open with a vignette regarding how facial and object recognition can be used to create a leaner consumer journey in a grocery store. Furthermore, in this brief vignette, we link this to data-collection and sharing between a consortium of retailers in accordance with a platform logic that enables both the prediction and personalisation of what an individual consumer is likely to need in another store. While we admit that this scenario is not necessarily here yet, we point to the fact that all the individual technologies are present in retail today, particularly if you combine digital and in-store applications such as data-collection infrastructure, third-party sharing, and object and face recognition, as well as the underlying digital, often app-based, platform structures enabling data sharing and automated financial transactions. We primarily use this vignette to set the scene for an analysis of what these practises mean for consumer trust per se, and what role trust plays in the successful and fair implementation of these types of methods. In order to do so, we problematise aspects such as the consumer's loss of control over his/her data, the lack of transparency in how prices are set, and, at worst, the loss of agency in the consumer's own decision-making in automated retail environments where there is a highly unbalanced distribution of information between the parties.

Ultimately, we seek to contribute to an understanding of the importance of consumer trust and involvement in the development and implementation of data-dependent retail personalisation. To this end, we point to relevant research in the field, and draw on focus-group interviews with Swedish consumers sampled into those who, beforehand, indicate a high level of trust in retail's data collection and those who indicate a low level of trust. We do this in order to address the issues of consumer trust

mentioned with regard to what we call platformised retail personalisation, and closely related automated data collection in digital retail, both in the physical and digital (and hybrid) environments.

The results from the focus group-interviews indicate that the level of trust that consumers generally have in data collection is of relevance to how successful retail's use of personalised recommendation systems and targeted ads will be. The focus-group participants generally expressed that trust is linked to a sense of control, also indicating, interestingly, that customer clubs and the explicit sharing of data—that is, situations whereby customers *actively* enter, for example, their addresses—are perceived as more credible and trustworthy.

- Firstly, it is remarkable that the members of neither the low-trust nor the high-trust groups say they inform themselves about the consequences of their choices, that is, reading user agreements or cookie notifications to the extent that they feel they are well-informed. The respondents find it impossible to read consent agreements for cookies or other website information regarding the collection of data and processing. The primary difference between the two groups regarding third-party cookies seems to be that the low-trust group is concerned about not having control, wanting to be more informed and expressing resignation, while the other feels more confident that their information is not being misused and can be of potential benefit and thus does not feel any apprehension.
- Secondly, this is placing trust at the centre of consumer sentiment. Overall, this indicates a major challenge regarding how to set up and communicate AI-driven systems that depend on data collection. More effort thus need to go into how *meaningful* consumer transparency and autonomy can be attained, parallel with how to ensure sufficient governance to prevent consumer manipulation in datafied consumer marketplaces.
- Thirdly, the focus-groups, along with other studies, indicate that data collection, automation and even personalisation are highly third-party dependent. That is, both consumers and retailers alike depend on platforms for handling their interfaces, anything from marketing to app stores, smartphones and data storage. This dependence adds to the

complexity and the possibly detrimental lack of data-handling transparency, for both retailers and consumers, thus potentially undermining trusted and consumer-focused personalisation in AI-driven retail.

Trust, it seems, is the main prerequisite for functioning markets per se, which is why it also plays a key role in how new data-dependent and automated technologies impact retail markets, both online and offline. In this chapter, we point to the challenges of a lack of consumer control linked to a lack of transparency in automated and potentially AI-driven personalisation. This indicates the need for retailers to be attentive to how they digitise their marketing and their systems of recommendation, in order not to undermine consumer trust. Given the results of this focus-group study, the sharing of consumer data with third parties is the most problematic aspect in terms of loss of control. That is, the challenges inherent in data-dependent and platformised retail personalisation should not only be seen as technological and legal. They are also highly social, in the sense that these methods should only be implemented in such a way that they fulfil consumer needs for empowerment and involvement in such a way that they are not only passively trusted, but also ultimately trustworthy.

Acknowledgements This study has partially been supported by: (i) the Wallenberg AI, Autonomous Systems and Software Program—Humanities and Society (WASP-HS) funded by the Marianne and Marcus Wallenberg Foundation and the Marcus and Amalia Wallenberg Foundation, as well as (ii) The Swedish Retail and Wholesale Council.

References

- Andersson Schwarz, J. (2017). Platform logic: An interdisciplinary approach to the platform based economy. *Policy & Internet*, 9(4), 374–394.
- Chang, M. K., Cheung, W., & Tang, M. (2013). Building trust online: Interactions among trust building mechanisms. *Information & Management*, 50(7), 439–445.

- Consumers International and Mozilla. (2022). *A consumer investigation into personalised pricing*. Retrieved January 2, 2023, from <https://www.consumersinternational.org/news-resources/news/releases/new-research-consumers-worldwide-concerned-by-opaque-online-pricing/>
- Cukier, K. (2021). Commentary: How AI shapes consumer experiences and expectations. *Journal of Marketing*, 85(1), 152–155.
- Datatilsynet. (2020). Personvernundersøkelsen 2019/2020. Om befolkningens holdninger til personvern og kjennskap til det nye personvernregelverket. Oslo.
- Draper, N. A., & Turow, J. (2019). The corporate cultivation of digital resignation. *New Media & Society*, 21(8), 1824–1839.
- Garbarino, E., & Lee, O. F. (2003). Dynamic pricing in internet retail: Effects on consumer trust. *Psychology & Marketing*, 20(6), 495–513.
- Kohl, U., & Eisler, J. (Eds.). (2021). *Data-driven Personalisation in markets, politics and law*. Cambridge University Press.
- Lafontaine, F., & Sivadasan, J. (2020). *The recent evolution of physical retail markets: Online retailing, big box stores, and the rise of restaurants (No. c14378)*. National Bureau of Economic Research.
- Larsson, S. (2021). Putting trust into antitrust? Competition policy and data-driven platforms. *European Journal of Communication*, 36(4), 391–403.
- Larsson, S., Emanuelsson, T., & Thiringer, S. (2020). *Tillit eller Tvång? Konsumenters förtroende för handelns datainsamling*. Fores.
- Larsson, S., & Heintz, F. (2020). Transparency in artificial intelligence. *Internet Policy Review*, 9(2), 1–16.
- Larsson, S., Jensen-Urstad, A., & Heintz, F. (2021). Notified but unaware: Third-party tracking online. *Critical Analysis of Law*, 8(1), 101–120.
- Mavroudis, V., & Veale, M. (2018). Eavesdropping whilst you're shopping: Balancing personalisation and privacy in connected retail spaces. In *Living in the internet of things: Cybersecurity of the IoT-2018* (pp. 1–10). IET.
- Mogaji, E., Soetan, T. O., & Kieu, T. A. (2020). The implications of artificial intelligence on the digital marketing of financial services to vulnerable customers. *Australasian Marketing Journal*, 29(3), 235–242.
- Poell, T., Nieborg, D., & Van Dijck, J. (2019). Platformisation. *Internet Policy Review*, 8(4), 1–13.
- Sveriges Konsumenter. (2022). *Jakten på kärlek – och dolda priser. dejtingappen Tinder och hyperindividanpassad prissättning*. Sveriges Konsumenter.
- The Verge. (2018, September 25) *Uber is overhauling the way it responds to emergencies and natural disasters*, by Andrew J. Hawkins.
- Turow, J. (2017). *The aisles have eyes. How retailers track your shopping, strip your privacy, and define your power*. Yale University Press.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

